Description. (Colour nomenclature from Smithe's Naturalist Colour Guide: The American Museum of Natural History.) Whole head and throat with 'pinkish tinge' Drab (27). Mantle, back, scapulars, secondaries to rump Dark Drab (119B). Rectrices upperside Hair Brown (119A) with grey reflection and faint bars, underside Cinnamon Drab (219C). Upper breast Sayal Brown (223C) merging below to Tawny Olive (223D) with belly, flanks and undertail-coverts Pale Pinkish Buff (121D). Primaries upper surface Olive-Brown (28) outer web darker, underside paler. Alula black. Bill red, iris orange-red and orbital ring yellow. Legs and toes dark brown. Compared with nominate *erythrorhynchus* and the grey *B.e. invictus* it is brighter browner.

Weights (g) and measurements (mm). ♂ holotype, wing 105.0, tail 85.0, exposed culmen 17.0, weight 46.0. Paratype, ♂ same day and place, wing 109.0, tail 85.0, exposed culmen 17.0, weight 47.5 (Reg. No. 15490/1263). Included within the range of this new subsp. is a ♂ (Reg. No. 15492/1263) from Ruiru, Kenya, 37°0'E, 1°15'S, collected on 31 Jan 1961 at 5000 ft. Wing 110.0, tail 93.0, exposed culmen 18.0.

Distribution. Samburu District of northern Kenya south to Ukambani, Ruiru and the upper Tana River in dry Acacia bushland between 3000 and 5000 ft.

Remarks. This small richly coloured race has been compared with both the nominate *B.e. erythrorhynchus* from Ethiopia and the "smallest and palest" form *B.e. invictus* from Somalia, whose range is given by Clancey (1962) as "Somalia, to adjacent Abyssinia (Ogaden) and the eastern Kenya Colony", as well as with a series from the highlands of western Kenya and Uganda and with *B.e. scotinus* from eastern Tanzania. This new race occupies the semi-arid Acacia-Commiphora bushland ecosystem with less than 400 mm rainfall, thus separating the population of the small *B.e. invictus* from the larger birds of the moister Kenya highlands over 5000 ft, *B.e. caffer* and from the nominate of the Ethiopian highlands.

Reference:
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The last St. Kitts Bullfinch *Loxigilla portoricensis grandis* (Emberizinae) and the extinction of its race

by Storrs L. Olson

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The island of St. Kitts, in the northern Lesser Antilles, was once inhabited by a large endemic subspecies *Loxigilla portoricensis grandis* Lawrence of the Puerto Rican Bullfinch *Loxigilla p. portoricensis* Daudin. The form was known previously only from 9 specimens collected by F. A. Ober in 1880, whereafter it could no longer be found and was presumed extinct (Danforth 1936). Possible explanations for the disappearance of this population were discussed by Raffaele (1977). Bond (1936, 1956) originally proposed that the birds had been eliminated by the monkey *Cercopithecus aethiops* that was introduced to the island before

1700. Greenway (1958) doubted this explanation and Raffaele (1977) presented several cogent arguments against it. Instead, Raffaele proposed that the restricted distribution of *L.p. grandis* to the upper slopes of Mt. Misery made it susceptible to hurricanes and specifically that the great hurricane of 7 August 1899, followed closely by another on 30 August, was responsible for the disappearance of the species on St. Kitts.

A hitherto overlooked specimen documents the persistence of *L.p. grandis* on St. Kitts for at least 30 years after the hurricane of 1899. This specimen (National Museum of Natural History, Smithsonian Institution, USNM 318207) was collected by Paul Bartsch on 26 July 1929 and preserved whole in alcohol, which doubtless contributed to its being overlooked. That someone may have sought to verify the record subsequently is suggested by a catalogue note to the effect that the specimen was "not found March 1942," although it has now reappeared.

Bartsch's field notes in the Division of Mollusks, Smithsonian Institution, show that on 26 July he was on Mt. Misery, where he did not quite gain the summit but followed one of the mountain's spurs all the way to the crest. He specifically mentioned that the "hurricane of last year [had] almost obliterated the trail," which further suggests that the bullfinch was capable of surviving hurricanes on Mt. Misery. Bartsch was on something of a whirlwind boat tour of the Lesser Antilles and apparently was on St. Kitts only on 25 and 26 July, arriving on Nevis later on the same day that he collected the bullfinch. His discovery of the bullfinch, the significance of which he evidently did not appreciate, seems the more curious considering the perfunctory nature of his visit and the fact that at least 6 collectors had been on St. Kitts between 1880 and 1929 without finding it (Danforth 1936); indeed, James Bond had preceded Bartsch to the island by only 7 months without encountering the species. More recent field work by H. A. Raffaele in July 1972, M. R. Browning in April 1977 and D. W. Steadman in February 1982 has failed to reveal the bird, so it is perhaps safe to assume that *L.p. grandis* is now indeed extinct.

The fact that *L.p. grandis* was restricted historically to the higher slopes of Mt. Misery prompted Raffaele (1977) to suggest that its large size arose through character displacement and that its restricted distribution resulted from competition with the Lesser Antillean Bullfinch *Loxigilla noctis*. Notwithstanding the fact that unequivocal documentation of either character displacement or interspecific competition seems to have eluded a large number of ecologists for decades, this explanation seems unlikely considering that the size difference between the bills of *L. noctis* and either of the forms of *L. portoricensis* (see measurements in Ridgway 1901) is as great as or greater than that between any of the sympatric, co-existing species of *Geospiza* (*s.s.*) in the Galapagos (Lack 1947).

L.p. grandis could have been more widely distributed in the past, possibly also occupying at least the islands of Nevis and St. Eustatius, which would have been coalesced with St. Kitts into a single island during the lowered sea levels of the last glacial period. Despite preliminary palaeontological surveys (D. W. Steadman) no vertebrate remains have been recovered from any of these islands except for those of a few larger species in archaeological deposits on St. Kitts (Wing 1973). There is no evidence of *L.p. grandis* in the known fossil faunas of Antigua or Barbuda or from the scantier remains so far recovered from the Anguilla Bank (Steadman *et al.* 1984 and Steadman pers. comm.).

The restriction of *L.p. grandis* to the higher slopes of Mt. Misery on St. Kitts could perhaps be due to Holocene destruction of lowland habitats. On St. Kitts,

lowland areas have "sustained agriculture for three centuries" and today "the foothills ... are cultivated as high as possible with sugar below and ground provision above" (Bent 1971:93). Palaeontological studies have shown that man-caused habitat destruction was responsible for the extinction of numerous small vertebrates on Antigua within the past 3500 years (Steadman *et al.* 1984). Many of these extinctions may have taken place during the colonial period, when plantation agriculture usurped the greater part of the land area of the Lesser Antilles (see e.g. Harris 1965).

Drier lowland areas appear to be more favourable for birds in the West Indies (Pregill & Olson 1981) and if wet uplands were not the preferred habitat for *L.p. grandis*, its reduced numbers on St. Kitts in historic times would be understandable. A much diminished population in suboptimal habitat might have been more susceptible to any one of a number of factors, or combination of factors, that might have effected its extinction, though what the ultimate cause may have been is still not readily discerned.

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A nest of the Double-toothed Barbet *Lybius bidentatus* parasitized by a honeyguide in Uganda

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Near Kaazi, c. 10 km from Kampala, Uganda, I found a nest of the Double-toothed Barbet *Lybius bidentatus aequatorialis* on 24 February 1964. One of the barbets flew to a hole 11 m up in a dead stump of an otherwise living tree, with a